

□if a English version is needed, please let me know□

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☐☐ ☐☐☐ email: gulifan@hotmail.com

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Turing Test

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17x17

[illegible]

AlphaGo Zero

19x19 board game

[illegible]

Technological Singularity AlphaGo Zero superhuman Quantum Supremacy

[illegible][illegible]

20

1

[illegible]

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□□AlphaGo Zero □ Superhuman □ Quantum Supremacy □□□

Nature









AlphaGo Zero 在 Nature 期刊上超越人类 [1] AlphaGo 在围棋领域取得突破，在 game 中 AlphaGo Zero 在围棋领域取得突破，在 game 中 AlphaGo Zero 在围棋领域取得突破，在 game 中



game Nature Quantum
Supremacy [2]

Shor's algorithm

Quantum Supremacy

qubit NISQnoisy
intermediate-scale quantum

Quantum Supremacy  Sycamore  NISQ  noise 
 noise 
 noise 

Quantum Supremacy noise

Sycamore
Sycamore
200
10000

Quantum Supremacy NISQ John Preskill [3]

Quantum Supremacy Quantum Supremacy Nature

Quantum Supremacy □□□□ optimization □ machine learning □□□□□□□□□□□□□□□□
□□□□□□□ NISQ □□ noisy □□□ Sycamore □□□□□□□□□□□□□□□□□□□□□□□□□□□□

noisy

[illegible]

Quantum Supremacy

Nature Superhuman Quantum Supremacy

Progression of AI capabilities over time.

niche market IT

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[1] Mastering the game of Go without human knowledge, Silver D., Schrittwieser J., Simonyan K. et al, published in Nature, on 18 October 2017:  
<https://www.nature.com/articles/nature24270>.

[2] Quantum supremacy using a programmable superconducting processor, Arute F. et al, published in Nature, on 23 October, 2019:  
<https://www.nature.com/articles/s41586-019-1666-5>

[3] <https://www.quantamagazine.org/john-preskill-explains-quantum-supremacy-20191002/>.

[4] Dialogo sopra i due massimi sistemi del mondo (Dialogue Concerning the Two Chief World Systems), Galileo Galilei, published in 1632.